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<u>**Amendments to Claims**</u>

Please amend the claims as follows:

1. (Currently Amended) <u>A machine-readable storage medium containing a set of instructions for causing a computing device to execute a method to calculate an economic value created by a manufacturing process for manufacturing products produced in a plurality of production units 1, 2, … , m, …, n-1, and n,</u>
<u>the production units respectively consuming ingredient materials Y_1, Y_2, . . ., Y_m , …, Y_{n-1}, Y_n, and respectively producing products X_1, X_2, . . ., X_m . . ., X_{n-1}, X_n,</u>
<u>wherein a product X_m produced in a production unit m can flow as an ingredient material Y_{m+1} to a subsequent production unit m+1, or can flow as an ingredient material Y_1, Y_2, . . . Y_{m-1} to one or more previous production units 1, 2, …, m-1</u> ~~A method of computing an economic value created by a particular business activity, the method comprising, in sequence~~ , <u>said method comprising</u> the steps of:

   a) calculating an aggregate cost of <u>each</u> ~~a~~ product ~~manufacture~~ <u>manufactured</u> ~~or acquisition activity~~ <u>by</u>:

   <u>i) collecting cost data from diverse sources into a relational database, the cost data collected by the steps of:</u>

       <u>1) collecting utility and ingredient materials cost for each product;</u>
       <u>2) assembling cost data for each production unit;</u>
       <u>3) assembling productivity, composition and packaging data for each product;</u>
       <u>4) collecting manufacturing volume by product for each production unit;</u>
       <u>5) apportioning the product X_m produced by each production unit m as ingredients Y to each of the other previous production units 1, 2, …, m-1, and subsequent production unit m+1 to establish a production mix;</u>

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    b) establishing a predetermined threshold for the difference between the entered or previously calculated ingredient cost and the aggregate cost of manufacture;

    c) upon receiving a cost change that affects the aggregate cost of manufacture, comparing the cost of ingredients Y of the ingredients list for all production units to the cost of manufacture for each product X to determine each affected ingredient Y;

    d) calculating an aggregate cost of manufacture of each product X_m based upon the production mix entered for each production unit m;

    e) for each affected ingredient Y that is used by a production unit to manufacture a product X, calculating a difference between the entered or previously calculated ingredient costs and the aggregate cost of manufacture, the fixed cost and the variable cost being calculated independently;

    f) if the difference between the entered or previously calculated ingredient cost and the aggregate cost of manufacture exceeds the predetermined threshold, replacing the ingredient cost with the aggregate cost of manufacture;

    g) recalculating all aggregate cost of manufacture values for all affected products; and

    h) if the difference between all entered or previously calculated ingredient costs and the aggregate costs of manufacture exceeds the predetermined threshold, repeating step f) and g);

    i b) selecting one or more parameters, the parameters comprising a customer, a sales region, a product grade and a market segment;

    j c) calculating a sales volume and a net price related to the one or more parameters;

    k d) calculating a manufacturing contribution related to the one or more parameters;

    l) [[e)]] calculating an after tax operating income related to the one or more parameters;

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m) [[f)]] <u>using the calculations of steps a) through l)</u>,
calculating an economic value added for the one or more
parameters, thereby determining the economic value created by
the <u>manufacturing process</u> ~~particular business activity~~.

2. (Canceled)

3. (Currently Amended) The <u>machine-readable storage medium</u>
~~method~~ of claim <u>1</u> ~~2~~ wherein the collection <u>step</u> ~~steps~~ a) i) _T
~~b) i), c) i), d) i) and d) ii)~~ is accomplished by loading the
data into predetermined fields in a relational database system.

4. (Currently Amended) The <u>machine-readable storage medium</u>
~~method~~ of claim <u>3</u> ~~2~~ wherein the collection <u>step</u> ~~steps~~ a) i) ~~, b)
i), c) i) and d) i) and ii)~~ further ~~comprise~~ <u>comprises</u>, before
the loading step, the step of accumulating data in one or more
spreadsheets.

5. (Currently Amended) The <u>machine-readable storage medium</u>
~~method~~ of claim <u>1</u> ~~2~~, further comprising, after each collection
step, the step of generating a discrepancy report by determining
if data required for a subsequent calculation is missing and
analyzing the data against predetermined criteria for
discrepancies or possible out of normal range values.

6. (Currently Amended) The <u>machine-readable storage medium</u>
~~method~~ of claim <u>1</u> ~~2~~ wherein the calculation steps a), ~~b), c)~~ d),
<u>g), j), k), l),</u> and <u>m)</u> [[e)]] are performed by:
    1) accessing the data in the predetermined fields of the
relational database system;
    2) applying predetermined equations to the data; and
    3) storing the results in predetermined results fields in
the relational database system.

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7. (Currently Amended) The machine-readable storage medium method of claim 6, further comprising, before each calculation step, the step of generating a discrepancy report by determining if data required for a subsequent calculation is missing and analyzing the data against predetermined criteria for discrepancies or possible out of normal range values.

8. (Currently Amended) The machine-readable storage medium method of claim 6 further comprising displaying the results in a graphical format, the graphical format being predetermined user selectable from a plurality of graphical formats by:

4) defining each graphical format to have predetermined input parameters;

5) accessing the predetermined results fields of the relational database that correspond to the input parameters.

9. (Currently Amended) The machine-readable storage medium method of claim 8 wherein the predetermined results fields are loaded into a spreadsheet and then into a pivot table to display the results.

10. (Currently Amended) The machine-readable storage medium method of claim 8 6 wherein the graphical format is a numeric table, comprising a pivot table.

11. (Currently Amended) The machine-readable storage medium method of claim 8 6 wherein the graphical format is a waterfall chart.

12. (Currently Amended) The machine-readable storage medium method of claim 8 6 wherein the graphical format is a bar chart.

13. (Currently Amended) The machine-readable storage medium method of claim 8 6 wherein the graphical format is a line graph.

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14. (Currently Amended) The <u>machine-readable storage medium</u> ~~method~~ of claim 1, wherein ~~the business activity is a manufacturing operation, and wherein~~ costs across families of products are distributed based upon shared use of manufacturing assets.

15. (Currently Amended) The <u>machine-readable storage medium</u> ~~method~~ of claim 14, wherein the shared use of assets is determined by the fraction of time a product family occupies each asset.

16. (Currently Amended) The <u>machine-readable storage medium</u> ~~method~~ of claim 14, wherein the shared use of assets is determined by the volume fraction of a product family flowing through each asset.

17. (Currently Amended) The <u>machine-readable storage medium</u> ~~method~~ of claim 14, wherein unexpected costs are allocated over all the products manufactured according to predetermined criteria.

18. (Currently Amended) The <u>machine-readable storage medium</u> ~~method~~ of claim 1, further comprising, before each calculation step, <u>a</u> ~~the~~ step of generating a discrepancy report by determining if data required for each calculation is missing and analyzing the data against predetermined criteria for discrepancies or possible out of normal range values.

19. (Currently Amended) The <u>machine-readable storage medium</u> ~~method~~ of claim 18, further comprising <u>a</u> ~~the~~ step of terminating the calculation if the discrepancy report indicates missing data or data containing discrepancies.

20. (Currently Amended) The <u>machine-readable storage medium</u> ~~method~~ of claim <u>1</u> ~~2~~, wherein the step a) of calculating an

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aggregate cost of a product manufacture or acquisition activity
further comprises the step of :

     ii) reconciling the cost of manufacture of an
internally produced <u>product</u> grade with the raw materials
list.

    21. (Currently Amended) The <u>machine-readable storage medium</u>
~~method~~ of claim 20, <u>the reconciling step</u> comprising the steps
of:

     <u>1</u>) ~~a)~~ upon receiving a cost change that can
affect the <u>cost of manufacture</u> ~~Cost of Manufacture~~,
comparing the Ingredients List for all <u>production
units</u> ~~Production Units~~ to the <u>cost of manufacture</u> ~~Cost
of Manufacture~~ for each product ~~Grade~~ to determine
each affected ingredient, where the <u>cost of
manufacture</u> ~~Cost of Manufacture~~ is an aggregated value
based upon the production mix entered;

     <u>2</u>) ~~b)~~ for each affected ingredient that is used
to manufacture a product grade, calculating the
difference between an existing (entered or previously
calculated) ingredient cost and the <u>cost of
manufacture</u> ~~Cost of Manufacture~~, where the fixed cost
and the variable cost is calculated independently;

     <u>3</u>) ~~c)~~ if the difference between the existing
ingredient cost and the <u>cost of manufacture</u> ~~Cost of
Manufacture~~ exceeds a predetermined threshold,
updating the ingredient cost with the cost of
manufacture;

     <u>4</u>) ~~d)~~ initiating a recalculation of all cost of
manufacture values for all affected grades;

     <u>5</u>) ~~e)~~ repeating steps <u>1) through 4)</u> ~~a) through
d)~~ until the difference between the entered ingredient
cost and the <u>cost of manufacture</u> ~~Cost of Manufacture~~
is less than or equal to the predetermined threshold

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or until a predetermined number of repetitions has
been reached.

22. (Currently Amended) A machine-readable storage medium
containing a set of instructions for causing a computing device
to calculate an economic value created by a particular business
activity, said instructions comprising the steps of:

a) receiving data from a user interface;

b) calculating an aggregate cost of a product manufacture
or acquisition activity;

c) providing an input port for a user to select one or more
parameters, the parameters comprising a customer, a sales
region, a product grade and a market segment;

d) calculating a sales volume and a net price related to
the one or more parameters;

e) calculating a manufacturing contribution related to the
one or more parameters;

f) calculating an after tax operating income related to the
one or more parameters;

g) using the calculations of steps b) through f),
calculating an economic value added (EVA) for the one or more
parameters, thereby determining the economic value created by
the particular business activity , wherein the economic value
added is calculated by the equation:

$$EVA = ((MC_{unit} - SC_{unit} - RD_{unit} - OC_{unit} - AC_{unit}) \times (1-TX) - (NRA_{unit} \times CC)) \times SV$$

where EVA is the economic value added,

MC_{unit} is Manufacturing Contribution per unit of product
(items, pounds, kilograms, etc.),

SC_{unit} is the selling cost per unit of product,

RD_{unit} is research and development cost per unit,

OC_{unit} is one time charges for the period per unit,

AC_{unit} is administration cost per unit, TX is the effective
tax rate,

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NRA_{unit} is the net Return On Net Assets (Accounts Receivable
- Accounts Payable + Inventory + Permanent Investment
- Depreciation),
CC is the average cost of capital, and SV is the sales
volume, i.e., total units sold .

23. (Currently Amended) The machine-readable storage medium
of A hybrid method of determining an economic value created by a
particular business activity in accordance with claim 1, the
computing device method utilizing a plurality of electronic
spreadsheets and a relational database, the spreadsheets being
used for the collection of data and the display of results, the
relational database being used to receive the data from the
spreadsheets, to calculate results in accordance with
predetermined equations and to store the results in predefined
data structures.

24. (Currently Amended) A system for computing an economic
value created by a manufacturing process, particular business
activity in accordance with the system executing the set of
instructions stored in the machine-readable storage medium of
claim 1, the system comprising:
    a server node having a memory therein, the memory having a
user-interface section, a custodian-accessible section, a data
interface section, and a repository section,
        the user-interface section having at least one
        predetermined user-accessible form for entering data
        and at least one predetermined graphical format for
        viewing data and results;
        the custodian-accessible section having
        privileged access to the user-interface section, to
        the data interface section and to the repository
        section;
        the repository section having at least one
        relational database containing predefined records that

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have been entered by a user or received by the data
interface and predetermined equations for operation
upon the records to produce results;

at least one user node connectible to the memory of the
server, the user node being operable in either an input mode or
an output mode,

when operable in the input mode, the user node being
connectible to the repository section for entry of data or for
editing of records previously entered by that user,

when operable in the output mode, the user node being
connectible to the repository section for retrieval of data and
results, the user node displaying data and results in accordance
with the at least one predetermined graphical format.

25. (New) The machine-readable storage medium of claim 1,
further comprising, after step b):

b1)   establishing a maximum number of repetitions to stop
the iterative process in case an erroneous value is entered or a
calculation error occurs; and

further comprising, after step g):

g1)   stopping the repetition of steps f) and g) if the
maximum number of repetitions is reached before the difference
between all entered or previously calculated ingredient costs
and the aggregate costs of manufacture is less than or equal to
the predetermined threshold.